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ABSTRACT

This report identifies the elements for improving performance in a standards-based system and carefully examines the incentives for students, teachers, schools, and states. Student incentives include using standards for promotion and admissions to higher education, standards for graduation from high school, requirements for employment or entry into apprenticeship programs, and opportunities to participate in extracurricular school-organized activities. Incentives for teachers entail opportunities to increase knowledge and skills, goal clarification, and incentives to improve student achievement. Schools can be motivated by the reallocation of resources, by boosting achievement through school awards, by helping parents reinforce their children's engagement in academic work, and by implementing more extracurricular programs. Finally, states can do their part by clarifying the mission of public education, by developing clear standards, by offering students incentives for academic engagement, by requiring schools to set aside a percentage of their budgets for professional development, and by increasing opportunities to celebrate student achievement. (RJM)

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A Policymaker's Guide To Incentives for Students, Teachers and Schools

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A Policymaker's Guide to Incentives for Students, Teachers and Schools

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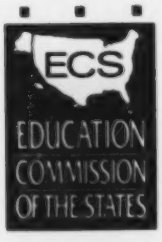

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EXECUTIVE SUMMARY

Over the past decade, Americans have created an ambitious agenda to reform and improve education. This agenda reflects a growing recognition that knowledge, skills and expertise are critical to personal and professional success in the future. Current efforts aim to triple the proportion of students — now a dismal 25% — who have mastered the complex subjects of mathematics, science, language arts/writing and history/social science.

This goal cannot be accomplished without changing the incentives — now, too often, either neutral or negative — for students, teachers and schools. Indeed, the only way to reach much higher standards is to ensure that students are surrounded by an education and social system that motivates them to take school much more seriously and to work harder at learning, that teachers develop the expertise to teach a more rigorous curriculum and improve the performance of diverse students, and that schools engage parents, students and teachers in this challenging, collective effort.

Incentives for Students

Students' tendency to disengage from school too often is reinforced by their peer culture, which discourages achievement; by society, which employs them in large numbers and for long hours in low-skilled jobs that compete with schoolwork; and by parents, who often take no interest in their children's schooling and/or set low standards for their academic performance. As a result, the bulk of adolescents are not motivated to do well in school — to take hard courses, to get good grades and to learn to high standards. School engagement activities should focus on major efforts to improve student achievement.

Incentives for students may include:

- Standards for promotion from one education level to the next
- Standards for graduation from high school
- Requirements for admission to higher education
- Requirements for employment or entry into an apprenticeship program
- Opportunities to participate in extracurricular school-organized activities.

Incentives for Teachers

What and how much students learn depend, more than anything else, on what and how teachers teach. The education system, therefore, needs to provide a clear set of messages and incentives that focus teachers' efforts on those activities that matter most — i.e., those that help teachers successfully teach a more rigorous curriculum to America's diverse student body. Among the keys:

- Goal clarification via mission, standards and testing
- Opportunities to work collaboratively at the school site
- Opportunities to enhance professional practice
- Incentives to increase knowledge and skills
- Incentives to improve student achievement.

Incentives for Schools

Beyond its students and its teachers, a school itself can serve as the focus of incentives. Strategies include:

- Restructuring toward higher-performance visions, by granting schools more autonomy, expanding public school choice and charter school programs, and providing "venture capital" for school improvements
- Reallocating education resources to more productive uses
- Boosting student achievement, through school-based performance awards and public recognition
- Helping parents reinforce their children's engagement in academic work

- Designing and administering more extracurricular programming.

The State Role

States can and should play key roles in creating incentives for students, teachers and schools by doing the following:

1. Clarifying the mission of public education
2. Developing — or requiring districts to develop — clear standards and assessments
3. Designing standards-based accountability systems
4. Offering students incentives for academic engagement
5. Requiring a substantial body of academic coursework for high school graduation and for college admission
6. Encouraging employers to consider high school performance
7. Developing an array of incentives for teachers
8. Encouraging decentralization
9. Requiring schools and districts to set aside 3-5% of their operating budget for ongoing professional development and continuous improvement
10. Encouraging or requiring districts to add knowledge- and skill-based elements to the teacher salary schedule
11. Providing incentives for districts and schools to create parent seminars and to expand after-school intramural, academic club and service activities
12. Developing a framework for districts to provide a lump-sum budget to each school
13. Expanding public school choice and charter school programs
14. Increasing opportunities to celebrate student achievement
15. Changing school finance systems to make incentives and requirements fair to all.

In conclusion, states enjoy many opportunities to create incentives for students, teachers and schools. A comprehensive incentive structure will provide both intrinsic and extrinsic reasons to reach high standards — the ultimate aim of school reform.

INTRODUCTION

Over the past decade, Americans have created an ambitious agenda to reform and improve education. This agenda has been crafted because the public, policymakers and education leaders realize that knowledge, skills and expertise are critically important for full participation in the family, social and economic life of the future. Current efforts aim to help all students reach high academic standards, or more specifically, to triple at least the proportion of students — now a dismal 25%, according to results of the National Assessment of Educational Progress[1] — who have mastered the complex subjects of mathematics, science, language arts/writing and history/social science. By any measure, this is a challenging goal.

As this policymaker's guide will argue, that goal cannot be accomplished without changing the current set of incentives for students, teachers and schools:

- For the vast majority of students, there are almost no incentives to excel at academic work.
- Teachers enjoy few incentives to enhance their professional practice or to work hard at improving student learning; indeed, current teacher incentives encourage leaving the classroom for nonteaching work instead of striving to raise students' academic achievement.
- Schools do not fully understand their role in working with either students or parents to enhance student engagement in schoolwork.

In short, current incentives are either neutral or negative. Given the lofty goals the education system faces, a new set of incentives is imperative.

This guide is designed to heighten policymakers' understanding of the choices and challenges related to creating incentives. It describes the various elements of a standards-based education system, emphasizing incentives and how they can contribute to state and local education improvement. The underlying premises of incentive systems used in this guide are:

- Academic standards should provide the basis for determining what students should know and be able to do and provide the foundation for evaluating student performance and progress.
- Schools, students and teachers should be held accountable for student achievement and student progress toward standards; incentives should be used to enhance motivation.
- Incentives alone will not produce the dramatic improvement students need — a number of other system changes deserve attention as well.

The first section of this guide identifies the elements for improving performance in a standards-based system. The second section describes incentives for students, including using standards for promotion and admissions to higher education or entry into apprenticeship programs. Incentives for teachers is dealt with in the third chapter and highlights incentives to increase knowledge and skills and student achievement. The fourth chapter describes incentives for schools, including reallocating resources, boosting achievement through school awards and implementing extracurricular programs. Finally, implications for state policymakers in creating incentives are provided in the fifth chapter.

When designed and implemented thoughtfully, incentive systems can help more students achieve at higher levels, and help improve the overall efficiency and effectiveness of public education.

CHAPTER 1

ELEMENTS FOR IMPROVING PERFORMANCE

Over the past decade, a strategy for standards and school-based reform has taken shape across the country. That strategy requires states to:

- Define a new mission for their education systems — namely, helping students reach high academic standards in core academic subjects. The new mission: To teach all students to proficiency in the complex subjects of mathematics, science, language arts/writing and history/social studies.

- Create goals, curriculum content and student performance standards for mathematics, science, language arts/writing and history/social science that give substantive meaning to this mission.

- Design a state testing system that measures achievement for all students in all subject areas and reports results to students, parents, teachers and the public.

- Suggest that boosting student achievement probably will require a change in school management and organization — from a top-down, bureaucratic model to a more decentralized, professional system.

To help schools realize this vision, states also need to:

- Create a pool of venture capital, supplying the initial funds for schools to begin restructuring themselves.

- Design a framework for school districts to decentralize their operating budgets, providing lump sums to school sites. School control over resources is a key element for substantive and successful restructuring.

- Allow school sites to recruit and select staff to build a cohesive faculty committed to reforms.

- Encourage or require districts to set aside portions of their budgets for ongoing professional development (2-3% of the site budget) and, assuming that technology will form part of many reform strategies, for ongoing technology purchases and upgrades (3-5% of the site budget).

- Finance and construct a statewide technology infrastructure, requiring schools to share data, voice and video information across the state.

- Create a statewide, school-based site on the World Wide Web, featuring fiscal information, student performance data and best practices.

- Design a set of incentives for students, teachers and schools that reinforce all of these directions. While the list of such incentives may be daunting, states should consider adopting them all.

To be sure, adopting some of these incentives is better than adopting none. But the only way to reach much higher standards is to ensure that students are surrounded by an education and social system that motivates them to take school much more seriously and to work harder at learning, that teachers develop the expertise to teach a more rigorous curriculum and improve the performance of diverse students, and that schools engage parents, students and teachers in this challenging, collective effort.

In raising student achievement, intrinsic incentives are clearly important. But, as this guidebook notes, extrinsic rewards — for both students and teachers — are equally essential.

CHAPTER 2

INCENTIVES FOR STUDENTS

In *Beyond the Classroom*, Larry Steinberg[1] argues large numbers of students are not engaged in school, schoolwork or school-related activities and, as a result, do not take school or academic studies seriously. Drawing from numerous long-term studies, Steinberg and his colleagues present compelling evidence of student disengagement:

- More than one-third of students say they pass the school day playing with peers.
- Two-thirds of students say they have cheated on an exam or copied a classmate's homework at some point during the past school year.
- A large percentage of students find their classes boring and their teachers' expectations low.

With no reason to work hard, many students describe high school graduation as their only major education goal.

Large numbers of students are not engaged in school, schoolwork or school-related activities and, as a result, do not take school or academic studies seriously.

Why are so many students disengaged from school? Steinberg points to life "beyond the classroom." American students spend large portions of their time on out-of-school activities that do not reinforce what they are supposed to be learning in school. These activities — part-time jobs, television, "hanging out" with peers, sometimes intense commitments to sports — are associated with lower levels of school engagement and academic achievement. As a result:

- The average American high school student spends four hours per week on homework, while the average child in many other countries spends four hours per day.
- Fewer than 15% of American students spend five hours or more per week reading for pleasure.
- Fully two-thirds of American high school students are employed; half hold jobs that require more than 15 hours per week.

Steinberg's research shows that as students' work time increases, their levels of school engagement and

academic achievement — and their enrollment in difficult courses — fall.

Steinberg and his colleagues also found that adolescent culture in America demeans school success and reinforces academic disengagement. For instance:

- Fewer than 20% of high school students have friends who think it is important to get good grades.
- A similarly small percentage of students regularly discuss schoolwork with their friends.
- About the same percentage say they do not try hard at school because they are concerned about what their friends will think.
- Only one in 10 students say they prefer to socialize with the "brains"; half say they prefer to socialize with the "partyers" or the "druggies."

The bulk of adolescents are not motivated to do well in school — to take hard courses, to get good grades and to learn to high standards.

Finally, Steinberg found that many parents are as disengaged from their parenting roles in supporting school excellence as their children are disengaged from school. His research showed:

- More than 40% of parents never attend a school event.
- Almost one-third of students say their parents have no idea how they are doing in school (in terms of courses taken, grades received or content learned).
- Many parents' standards for their children's performance are quite low — the two-thirds of parents who link rewards and sanctions to their children's grades often accept a grade of C or D as adequate.

In short, students' tendency to disengage from school is reinforced by their peer culture, which discourages achievement; by society, which employs them in large numbers and for long hours in low-skilled jobs that compete with schoolwork; and by parents, who often take no interest in their children's schooling and/or set low standards for their academic performance. As a result, the bulk of adolescents are not motivated to do

well in school — to take hard courses, to get good grades and to learn to high standards. Such disengagement is associated with other risky behavior, including drug and alcohol abuse, depression and delinquency.

Research does show, however, that schools can play a major role in structuring the lives of teenagers and in remedying the problems listed above. As students become more engaged in school, the rate of negative social behavior begins to decline and academic performance begins to improve. Students engaged in schoolwork attend classes, try to do well in them, complete assigned homework, do not cheat, work less often in outside jobs, participate more (though moderately) in school activities and engage less frequently in socially undesirable actions. These positive steps seem to be the result, rather than the cause, of school engagement.

School engagement, therefore, should form a major focus of efforts to improve student achievement. The goal is to devise a set of incentives and rewards that reinforce school engagement through a multiple set of messages, both inside and outside of school.

Such incentives may include:

- Standards for promotion from one education level to the next
- Standards for graduation from high school
- Requirements for admission into higher education
- Requirements for employment or entry into an apprenticeship program
- Opportunities to participate in extracurricular school-organized activities.

A. Standards for Promotion from One Education Level to the Next

States are now developing curriculum content and student performance standards in core academic subject areas — mathematics, language arts/writing, science and social studies, among others. Most states are developing these standards at key demarcation points, typically the end of elementary school (4th or 5th grade), the end of middle school (8th grade) and some point in high school (often the 10th grade, which allows students to match their academic work to the career path they intend to pursue after high school).

Although a few states require students to pass some form of test to graduate from high school, the test is often less rigorous than the high school standards themselves. Even fewer states require students to perform at or above the elementary school standards to be promoted to middle school or at or above the middle school standards to be promoted to high school. In short, although states are developing rigorous standards, they are attaching few, if any, stakes to these standards.

For late middle school students and for most high schoolers (those who do not choose to attend selective colleges), therefore, there are no clear reasons to spend much time or effort striving to reach high standards. Although some students — particularly those in elementary school — have a natural love of learning, adolescents need extrinsic incentives to work hard in school. In the absence of such incentives, most adolescents prefer nonacademic pursuits.

To remedy this problem, standards must carry consequences. For example: Make the achievement of 4th- or 5th-grade standards a prerequisite for promotion to middle school, and make the achievement of 8th-grade standards a prerequisite for promotion to high school. Implemented wisely and fairly, such a policy can produce dramatic results.[6]

Most other countries tell students that how far they progress, both in school and in life, depends at least in part on how well they perform. And while other countries often use tests to sort students at the secondary-school level, the United States does not need to do so.[7] The appropriate — and now missing — message for American students is that school should be taken seriously.

Critics may argue that holding students back has negative consequences. Indeed, research shows that students who are held back in elementary school learn much less

at the end of the subsequent year than do their peers who are promoted.[5] But two points should be made. First, the research pertains to grade-to-grade promotion, while the recommendation above concerns level-to-level promotion (i.e., elementary to middle school, middle school to high school). Second, students who are held back are usually exposed to the same (largely unspecified) curriculum in the same pedagogical way, while those who are promoted are exposed to the next year's curriculum. There are better ways to help slower-learning students than simply to give them a second dose of the same material.

If high standards become a condition for promotion from one schooling level to the next, the education system must ensure that every student has an opportunity to reach them.

Schools committed to teaching students to a set of 4th- or 5th-grade and 8th-grade standards would need to follow two primary strategies. First, they would need to create grade-to-grade content and proficiency standards, coupled with even more detailed plans linking curriculum units. In other words, a school's entire faculty would need to design a system for exposing all students to the content specified in the standards; many schools, in contrast, allow teachers to make their own decisions about curriculum coverage.

Second, schools would need to provide additional services to students who require extra time and help to reach proficiency. For example, the Success for All/Roots and Wings program offers tutoring to ensure all elementary students can become proficient readers by the 3rd or 4th grade. Chicago's new summer school program provides extra help for 8th-grade students who have not reached the standards for high school admission; several high schools also offer tutoring and homework assistance to help students improve their performance. If high standards become a condition for promotion from one schooling level to the next, the education system must ensure that every student has an opportunity to reach them.

B. Standards for Graduation from High School

At the high school level, standards-based incentives may entail three steps:

- Require all students to take a large, common core of academic courses

- Require students to take a similarly large number of common "end-of-course" examinations or construct a comprehensive high-school exit examination covering the common core academic standards specified for all high school students

- Require an aggressive minimum average score on a prescribed number of end-of-course examinations or a high "cut score" on the comprehensive examination for graduation.

Again, if such a policy is implemented, high schools must teach the common core curriculum to all students and provide extra assistance to those who need it. A common core could simplify most high school programs, which often include endless lists of undemanding electives. Extra assistance may entail additional resources (discussed in the section on incentives for schools).

A strong body of research shows that these incentives would have significant, substantive and positive impacts on high school students:

- In response to the 1983 *A Nation at Risk* report, many states increased the number of academic courses required for high school graduation. As a result, more students took more academic courses, while course content was not "watered down."[9]

- Large-scale, longitudinal data show that offering a constrained curriculum — i.e., requiring all students to take a large set of common academic courses — produces higher levels of achievement, both overall and among lower-performing students.[10]

- Several large cities are now eliminating "general mathematics" courses, typically geared to students who have low mathematical achievement and requiring such students to take algebra instead (sometimes "stretched" over three rather than two semesters). Recent research shows these students learn considerably more under this approach, not only in basic arithmetic but also in higher mathematical and algebraic concepts.[11]

Requiring all students to take a large set of common academic courses — produces higher levels of achievement.

- Students in countries or states that have curriculum-based external exit exams learn more than students in countries or states that do not; the difference often exceeds a full grade level in mathematics and in science.[12]

Contrary to many predictions, requiring a larger academic core for high school graduation is not associated with a higher high school dropout rate; indeed, research over the past decade indicates that students work harder to meet higher expectations and actually drop out of school at a lower rate.[13] This last finding holds outside of high school as well. When the National Collegiate Athletic Association's Proposition 48 raised the minimum grade-point average and Scholastic Aptitude Test (SAT) scores for participation in college-level athletics, for example, greater percentages of low-income and minority students qualified.[14] Similarly, when states have raised the standard for passing the bar exam in law, the pass rate actually has increased.[15] In short, raising expectations generates more effort from most students.

Contrary to many predictions, requiring a larger academic core for high school graduation is not associated with a higher high school dropout rate.

Recent efforts in Milwaukee provide another example. Four years ago, the Milwaukee Public Schools required students to pass a rigorous new mathematics course to graduate from high school. In the first year, the pass rate was only 35%. Rather than lowering the standards, Milwaukee invested in ongoing teacher training, provided after-school tutoring and instituted a summer school program. Four years later, the pass rate rose to 75%.

The rewards of strong incentives are clear. Without them, students will lack reasons to learn and likely will remain disengaged from school and unmotivated to reach high standards.

C. Requirements for Admission to Higher Education

Admission to higher education can substantially affect the behavior of students and schools. Several decades ago, for example, when colleges began requiring applicants to have taken a certain number and type of "Carnegie" course units, high schools and students quickly accommodated.

Similarly, in the 1980s, when state universities began requiring applicants to take a larger number of academic courses to gain admission, the percentage of students taking such courses rose substantially within a few years — as did their grade-point averages.[16] Given the impact these incentives can have, public institutions of higher education will want to incorporate the nature and difficulty of high school courses, as well as student performance on either the end-of-course examinations or the comprehensive high school exit examinations, in their admissions decisions. Most colleges and universities do not do so. Instead, admissions decisions typically rest on students' scores on either the SAT or the ACT (American College Testing) program. Neither of these assessments is linked in any substantive way to high school curriculum content or student performance standards.

The result is a disjunction in the signals high school students receive about what performance matters. Although some performance might matter for high school graduation, it does not directly matter for college admission.

This is not the case in most other countries. In nearly all other advanced, English-speaking democracies, as well as many other countries, end-of-high-school examination results are a key determinant of college and university entrance. Such systems may put too much weight on the score of a single test. But high school performance ought to bear at least some connection to further education opportunities.

Of course some states do not have high school exit exams, and those that do have different tests and different standards for passing. The SAT and ACT tests fill a void by providing a uniform national measure of student performance — a particularly valuable service in a nation with 50 different states and 14,000 different school districts. But even these tests are largely unconnected to high school performance.

Ongoing research by Stanford University's Michael Kirst also shows that course placement within most state colleges and universities bears no relationship to high school achievement or to examination scores

Course placement within most state colleges and universities bears no relationship to high school achievement or to examination scores required for admission.

required for admission.[17] Students may take one set of tests for a high school course grade, another set of comprehensive tests for high school graduation, a third set of tests for college admission and a fourth set of tests for course placement with virtually no formal connections among any of them.

To help students understand the importance of precollege performance, admissions decisions should at least incorporate K-12 tests of academic achievement, rather than general aptitude tests or other test scores not directly tied to a state's high school curriculum content and performance standards.

Ultimately, states — and perhaps the nation — should consider the advantages of using common, end-of-course examinations for high school students. Such a strategy would clarify the meaning of standards, the expectations for academic achievement and entrance in colleges and universities. Linked to requirements for promotion into and out of high school, this strategy would persuade students that their academic performance matters.

D. Requirements for Employment or Entry into an Apprenticeship Program

How can educators and policymakers make academic performance matter for students who enter the labor market after high school? At present, most employers do not consider what sort of courses students have taken or how well they have performed in class or on tests. Companies that hire high school graduates rarely, if ever, examine transcripts. In the real world, some students may conclude, academic performance is essentially irrelevant.

In many other countries, the opposite is true. For students who decide not to continue their education immediately after high school, the prospects of employment, the availability of apprenticeships, sometimes even the size of their entry-level salary depend on how well they did in school. Performance on comprehensive high school graduation examination is particularly important. The lesson for many foreign students: the harder you work and better you do, the more plentiful and more attractive your employment options.

That lesson should be salient in this country, too, as the demand for skilled labor grows. The spread of technology — from automobile production to financial services — has put a premium on cognitive expertise. Indeed, cognitive skills are increasingly important in any job, even for those who enter the workforce immediately after high school.

Some companies are making academic achievement matter. IBM, for example, recently decided to require its human resource departments to consider student performance in determining job offers and starting salaries for new high school graduates.

Such policies present a number of complications, however. These include:

- High school transcripts are often difficult to obtain and to understand — grades may not signify much, course titles do not always convey content. A larger list of required core academic subjects, with common titles and specified content, would help alleviate the latter problem. Automating transcript record-keeping would facilitate access and use.

- Courts have ruled that test scores used in selection and pay be directly related to the particular job in question. Heavy use of high school performance records might prompt legal challenges. And while large companies such as IBM have the financial clout to withstand such challenges, smaller companies may not. Legislation addressing the use of high school performance tests could reduce the likelihood of legal challenges.

- Since only a few states have tied assessments to high school content and performance standards, there is no easy way for companies to compare student performance across schools or states.

Nevertheless, in order to make academic achievement matter for all high school students, the business community should give substantial weight to the types

IBM: IF YOU WANT TO WORK FOR US, DO WELL IN SCHOOL

At the conclusion of the 1996 National Education Summit, participating governors and business leaders made a number of commitments to establish high academic standards, make students more accountable and develop more effective uses of technology in schools. One of these commitments included changing the way participating companies hire entry-level workers.

Business leaders agreed to require job applicants to demonstrate academic achievement through high school records such as academic transcripts, diplomas, portfolios or certificates of initial mastery. By reviewing the high school performance of job candidates, these employers are sending a powerful message to students: How and what you do in school will affect your future employment choices.

IBM began by creating an initial screening tool to improve and streamline the selection system for manufacturing production and distribution. This tool, called the Manufacturing Applicant Data Form, focuses on academic achievement, previous job experiences and skills. The academic section evaluates specific high school courses taken by the applicant and how well he or she did.

IBM is particularly interested in performance on courses that teach the skills it has determined to be important for success in its manufacturing jobs. For example, IBM research identified courses that lead to strong communication, math and computer skills, as well as some science courses (e.g., chemistry and physics) and trade courses (e.g., electronics and mechanics).

The research also showed that previous job experience and personal qualities (e.g., work orientation, flexibility and teamwork) also are important, so the new applicant data form incorporates an evaluation of job experience and personal qualities as well.

The form is completed with the application for employment. When the application and form are submitted, an IBM recruiter scores the form to identify competitive candidates. These people continue with the selection process, which includes visiting an IBM manufacturing site for interviews, testing and production line tours. If an applicant is given a job offer, IBM requires a final high school transcript in order to verify the information about high school courses and performance.

Although the program is too new to evaluate for effectiveness, IBM is optimistic that this screening and hiring process will lead to an improved selection process and send a message to high school students that courses and their performance matter in the world of work.

Adapted from IBM hiring practices and the 1996 National Education Summit Commitment, 1997. www.ibm.com/IBM/ibmgives/hiring.htm

of courses job applicants have taken, as well as the grades and scores they have received, in making employment, salary and apprenticeship decisions.

E. Opportunities To Participate in Extracurricular, School-Organized Activities

The incentives under discussion here are designed to engage students in their schoolwork so they are motivated to work hard and do well. Such incentives should address not simply academic performance — the focus of the four preceding sections — but extracurricular work as well. Research shows that students who participate in after-school activities — clubs, sports, service projects — also are more likely to do their schoolwork. Active students take more academic courses, perform better and generally reach higher standards of achievement.

Unfortunately, funding for after-school activities has fallen. School districts place a priority on competitive sports, especially football and basketball, even though such activities provide the least benefit for academic achievement. Indeed, such "big-time" sports may require so many hours each week that the participants' academic performance is damaged.

By contrast, participation in other sports — soccer, volleyball, swimming, track, baseball, etc. — usually requires fewer hours per week and is more strongly, though still only modestly, associated with higher levels of academic achievement.[18] The strongest after-school links to increased performance come from clubs, whether academic or social, and service activities, most of all.[19] (Very little is known about the academic benefits of intramural sports, but many high schools are cutting such activities in favor of competitive sports.)

Given these findings, students should receive many more opportunities to participate in extracurricular clubs, service programs and intramural sports, in addition to (or perhaps instead of) competitive sports.

CHAPTER 3

INCENTIVES FOR TEACHERS

What and how much students learn depend, more than anything else, on what and how teachers teach. The education system, therefore, needs to provide a clear set of messages and incentives that focus teachers' efforts on those activities that matter most — i.e., those that help teachers successfully teach a more rigorous curriculum to America's diverse student body.

The following discussion describes five types of teacher incentives (three intrinsic, two extrinsic):

- Goal clarification via mission, standards and testing
- Opportunities to work collaboratively at the school site
- Opportunities to enhance professional practice
- Incentives to increase knowledge and skills
- Incentives to improve student achievement.

A. Goal Clarification via Mission, Standards and Testing

Until recently, many teachers worked in a murky environment: missions were vague, standards were absent, and few standardized tests provided useful information about student performance. To a large extent, the education system told teachers neither what to do nor how well they were doing. Schools were intended to teach students academic skills, or to prepare young adults for citizenship and family life, or to provide future employees with the skills they needed to succeed in the labor market. But the goals were rarely clear.

The recent advent of standards- and school-based reforms is helping to clarify the purpose of public education. Mission statements that once referred vaguely to "maximizing student potential" now stipulate such things as: "The mission of (this district or state) is to teach students to proficiency standards in language arts/writing, mathematics, science and history/social science." State education goals, curriculum content and performance standards, and related assessment systems provide solid information on student learning.

The education system . . . needs to provide a clear set of messages and incentives that focus teachers' efforts on those activities that matter most.

Moreover, emerging research shows that the new focus on rich academics motivates teachers.[20] In states or districts that have set clear performance targets for schoolwide improvement in student achievement, for instance, teachers understand and support the targets and have begun to channel their efforts toward reaching them. For the first time in their professional lives, many teachers report, they know where to focus their energies.

Specifying the primary objective of the education system — to teach students to high standards in core academic subjects — functions as a significant incentive for teachers. Few teachers resent such goal clarification; in fact, many teachers find the new focus empowering.

Indeed, teaching all students to rigorous standards is a goal long sought by most educators. This goal entails more than teaching just basic skills or teaching some students to high levels. Most teachers recognize that advanced cognitive skills are key to personal, social and economic satisfaction in the 21st century. In effect, the new reforms tell teachers to do what most have always wanted to do — teach all students to high standards.

Of course, the endless lists of standards that many national efforts have produced are not realistic. More useful models have come from states, such as Colorado, Connecticut, Florida, Kentucky, Maryland, Virginia and Wisconsin; from local districts, such as Boston, Cincinnati, Madison, Memphis, New York, Philadelphia and Seattle; and from school reform networks, including the Modern Red Schoolhouse, the Edison Project, Core Knowledge Schools and New Standards. The standards these entities have developed define the most important subjects for typical schools to teach.

States and school districts are continuing to refine standards and to develop valid and reliable testing systems. These efforts deserve vigorous support.

B. Opportunities To Work Collaboratively To Improve Their School

Teachers value working with their colleagues, not only on curriculum and instructional issues but also in the broader areas of school organization, resource allocation and management. Opportunities for collaborative decisionmaking are an important incentive for many teachers, particularly those with advanced training in and a deep commitment to the teaching profession.

In the Success for All/Roots and Wings program, for example, different subjects require different groupings: students form similar-level groups for reading, while heterogeneous groupings are used for mathematics, science and social studies. Teachers in these schools cannot be concerned solely with curriculum and pedagogy; school organization and student groupings are integral to the instructional program as well.

Most teachers welcome opportunities to take part in virtually all aspects of school organization and management. Changing districts from top-down, bureaucratic systems to more decentralized, professional models, combined with accountability for results, can function as intrinsic incentives for teachers. When such strategies are designed well at both the district and school levels, teachers become engaged in a variety of decisionmaking activities, teacher leadership is expanded, teachers willingly spend more hours per day and per week on the multiple tasks of running the school,[21] and morale and enthusiasm rise.

Such effects should not be surprising. Nearly all workers want to be involved in making key decisions about their work environment, and opportunities to do so motivate them to work hard toward system goals. Such active involvement is especially appropriate when the work is complex, when it is best performed in a collaborative fashion and when it entails day-to-day uncertainty — all strong characteristics of teaching.

Opportunities to further their training and enhance their knowledge and skills motivate all types of workers, especially those with higher education. Most teachers, particularly those committed to their profession, view professional development as one of the most worthwhile and motivating activities in which they participate. States should dramatically expand the number and types of opportunities for teachers to engage in long-term, specific, sustained professional development, focused on improving their curricular knowledge and instructional skills.

Capacity development — training to develop needed new skills — is critical to effective implementation of standards- and school-based research. Substantial ongoing professional development is needed not only for the more difficult curriculum and instruction program, but also for the broader roles teachers are assuming in schools. These roles include advising and counseling students, developing curriculum, training colleagues and managing schools themselves.

Capacity development — training to develop needed new skills — is critical to effective implementation of standards- and school-based research.

Research shows the best professional development is embedded in the curriculum to be taught, sustained over a long period of time and equipped with substantial opportunities for classroom practice and feedback. Such training not only enhances teachers' classroom expertise but also improves student achievement.

Teacher salary structures have been static for decades. The single salary schedule — basing increases on years of experience, education units and degrees — was created in the early 20th century to eliminate pay differentials among elementary and secondary teachers, male and female teachers, and minority and nonminority teachers. The single salary schedule also reduced the effect of whim — a key factor when individual contracts were negotiated privately between powerful administrators and essentially powerless teachers. The single salary schedule has remained in place for nearly

PRAXIS, INTASC AND THE NATIONAL BOARD

*The **Praxis** assessments have been developed by the Educational Testing Service. Praxis I is a basic literacy and numeracy test given in preservice training and would not be part of a salary schedule. Praxis II comprises subject-matter tests that indicate whether individuals know the content they will be teaching; results could be used for initial licensure and included in a salary schedule. Praxis III is an assessment of initial pedagogical expertise, common across all content areas and education levels; the results usually are determined during the first year of teaching and could be used in a salary schedule. Ohio is beginning to use this system to license all new teachers.*

*The **Interstate New Teacher and Assessment Consortium (INTASC)** is a project of the Council of Chief State School Officers. The council is developing assessments for beginning teachers in 11 areas: mathematics, science, language arts and social studies for both middle and high school; general middle school; general elementary school; and special education. INTASC assesses more complicated pedagogical strategies needed to teach specific subject-matter content. Connecticut is beginning to use this system to license all new teachers.*

*The **National Board for Professional Teaching Standards** is developing assessments to certify teachers in approximately 30 different areas. The board's assessments, which consist of 10 different exercises, seek to determine if a teacher has and can show the expertise typical of successful, accomplished teachers. All assessments will be developed within the next two to three years, and assessments covering the majority of teachers' endorsement areas are available now.*

All three of these efforts feature rich and clear descriptions of the teaching practice they are assessing and valid and reliable procedures for determining whether an individual teacher's practice meets the standards.

None suggests how large a salary increment should accompany a teacher's performance; that decision would be made by a state or district.

the entire century because it is fair, predictable and easy to administer.

At best, this salary structure provides only mild encouragement for teachers to enhance their professional knowledge and skills. Too often, the single salary schedule rewards teachers for earning additional units unrelated to their teaching assignments — e.g., educational administration degrees that prepare them to leave the classroom. Research shows that, on average, greater experience (beyond the first few years of teaching) does not produce more expertise or success in the classroom.

Most organizations outside of education also base annual salary increases on years of experience or seniority. But as these organizations restructure themselves for higher performance, they often change their pay structures as well — rewarding the knowledge and skills needed in the work environment. Such compensation changes match current education initiatives: teachers need more content knowledge, better curriculum and instructional strategies, and skills to engage productively in broader school-based management actions. And while professional development is intrinsically motivating for teachers, adding pay increases provides an extrinsic reward.

A knowledge- and skill-based pay system requires two key elements: clear descriptions of the knowledge and skills desired, and valid and reliable assessments to determine whether individual teachers have the knowledge and skills required. The Educational Testing Service's (ETS) Praxis effort, the Interstate New Teacher Assessment and Support Consortium

Figure 1

INCREASING KNOWLEDGE AND SKILL ELEMENTS OVER A TEACHER'S CAREER

Teachers take Praxis II to assess subject-matter knowledge in areas they will be teaching.

Teachers take Praxis III to assess initial pedagogical expertise during the first year of teaching.

Teachers take the INTASC test to assess more complicated pedagogical expertise and subject-matter content.

Length of a Teacher's Career

Teachers continue to increase knowledge and skills and can be recognized as lead teachers, outstanding teachers or experts in implementing whole-school designs.

Teachers pass the National Board for Professional Teaching Standards assessments indicating they have the expertise of accomplished, successful teachers.

(INTASC) of the Council of Chief State School Officers (CCSSO) and the National Board for Professional Teaching Standards (NBPTS) are all developing such teaching standards and assessments (see page 16).

Figure 1 traces these standards and assessments over a typical teacher's career. ETS' Praxis II and Praxis III assessments would occur during the first year, testing beginning teacher skills and focusing on the generic teaching strategies that cut across all subject areas. INTASC standards assess content-specific pedagogical skills, those usually developed more fully by the second or third year of teaching. NBPTS assesses whether teacher expertise meets high and rigorous standards for experienced, accomplished teachers. Few efforts have been created to identify teaching standards in the period — often several years — between INTASC and NBPTS certification; this area could be developed at the district or state level. This is also the period during which teachers likely would acquire the expertise particular to their school's vision or design.

Several types of knowledge and skills could be considered in designing a salary structure that augments or replaces the current schedule (see Figure 2 on page 18). One example: core instructional skills reflected in a set of national standards appropriate for all teachers. The Praxis II and III assessments, the INTASC standards, and, at a higher level, NBPTS certification requirements illustrate this approach.

Schools also might emphasize individual skills: the ability to speak students' primary language, for example, or expertise in an area for which a teacher shortage exists. Schools that participate in national reform networks, such as Roots and Wings, Modern Red Schoolhouse or the Edison Project, may want teachers to demonstrate an understanding of their particular phi-

Figure 2

EXAMPLES OF DIFFERENT TYPES OF KNOWLEDGE AND SKILLS TO CONSIDER IN DESIGNING A NEW TEACHER SALARY STRUCTURE

Core Teaching Skills:	**Knowledge and Skills To Implement School Designs Such as:**
Praxis INTASC Teaching knowledge and skills assessed by other national assessments NBPTS	Success for All Roots and Wings Accelerated Schools Modern Red Schoolhouse Edison Project
Locally Identified Teaching Skills:	**Functional Skills:**
Second language skills (e.g., for English as a Second Language) Second license or endorsement (e.g., to teach in an integrated curriculum)	Leadership Management Financial Professional development Curriculum development

losophy. Finally, some schools may want teachers to master broader roles, including leadership, training or financial management.

Many of these approaches already have been implemented. In Colorado, for example, the Douglas County school district for several years has tied some pay to knowledge and skills; early reports suggest the effort has enjoyed considerable success. Hammond, Indiana, recently negotiated a contract allowing NBPTS certification to move a teacher to the Ph.D. salary level. Kentucky has made board certification equivalent to a master's degree plus 30 units. Other states and localities either subsidize the board assessment (which costs $2,000 per teacher) or offer a salary bonus or permanent salary increase equal to up to 10% of salary. Researchers Allan Odden and Carolyn Kelley[18] present a series of models for introducing a knowledge- and skill-based pay system, as either an addition to or a replacement for the current teacher salary schedule.

It may be time to modify teacher salary schedules by providing monetary incentives for teachers to expand their knowledge and skills. The knowledge and skills that become part of such new pay schedules should help teachers teach rigorous new curriculum, expand their roles in school organization and management, and raise student achievement. These extrinsic incentives would be aligned closely with the intrinsic rewards teachers receive by furthering their professional development.

In some states and districts, salary bonuses are provided to the entire staffs of schools that meet or exceed spe-

cific targets for raising student achievement. These extrinsic incentives — often controversial — are called school-based performance awards.

The Consortium for Policy Research in Education has researched the effect of these programs in Kentucky, Maryland and Charlotte-Mecklenburg, North Carolina. Preliminary results suggest these incentives stimulate collaborative work and clarify goals — both sources of intrinsic motivation. Teachers respond by working to improve the curriculum and instructional program in areas where student achievement is weak. And while money is not their main motive, teachers appreciate the financial rewards as well.

These programs clearly deserve serious consideration. The best apply to entire schools and identify the most valued outcomes — typically student achievement in four or five core academic subjects.[33] (Parent satisfaction, student promotion and graduation rates often are targeted as well, but usually constitute only 20-25% of the performance measure.[34])

To evaluate student achievement, tests need to measure both what students know and what they can do with that knowledge. State assessments of complex problem-solving capabilities are especially useful for this purpose.

A school's progress on these tests is generally based on the school's own past performance. Improvement is calculated for students at all levels of achievement, as well as those with disabilities and minority languages. Among the other considerations are how to treat students who do not remain in the same school for the entire year and whether to measure progress by individuals or by cohorts. (The latter decision is usually determined by the state testing system.)

Providing funding for these award programs is critical. Incentives typically total $1,000 per teacher for all licensed professionals in qualifying schools[35]; an average of $400-$500 goes to each classified staff member. If half of the schools in a district qualified, the awards would amount to roughly 1% of the district's operating budget.[36]

Some districts restrict their bonuses to instructional purposes. One variation would be an individual, instructional materials fund, which teachers could spend as they see fit. (Teachers typically spend between $400 and $600 of their own money on instructional materials each year.)[37] Alternatively, rewards might be placed in a schoolwide improvement fund.

Whatever form they take, school-based performance awards can focus teacher and school attention on improving student achievement in core academic subjects. Given their relatively low cost, these incentives can help deliver strong results.

CHAPTER 4

INCENTIVES FOR SCHOOLS

Beyond its students and its teachers, a school itself can serve as the focus of incentives. Among the goals are the following:

- Restructuring toward higher-performance visions
- Reallocating education resources to more productive uses
- Boosting student achievement
- Helping parents reinforce their children's engagement in academic work
- Providing extracurricular programming.

A. Incentives for Restructuring Toward Higher-Performance Visions

The major task facing schools under standards- and school-based reform is to determine site strategies for doubling or tripling their levels of student achievement. Although many schools can raise student performance in the short term simply by doing what they now do better, most will need to take more dramatic steps. Schools need a vision or whole-school design that encourages a stronger and more rigorous curriculum and instructional program, new ways of organizing teaching and learning, and more teacher involvement in running the school. Restructuring schools toward "higher-performance" visions will require considerable time.

At least four types of incentives can put schools on this path. These include the following:

1. Grant schools more autonomy.

Whether through school- or site-based management, districts can decentralize authority — maintaining control over standards, assessments and accountability while allowing schools to decide how best to reach common goals. Although many districts claim to provide schools with such authority, that is not usually the case. The most recent study of school decentralization in Charlotte-Mecklenburg, Chicago, Cincinnati, Denver, Los Angeles and Seattle found that while these efforts represent some of the most robust devolution initiatives in the country, districts give schools unclear authority over budgets and personnel rights, little training, few if any ideas about restructuring themselves and weak accountability systems. Only modest improvements result.[28]

Under real school-based management, districts would give schools lump-sum budgets rather than specify staff sizes and materials; allow schools to recruit and select their own staff, free from seniority "bumping" rights or central office selection; and permit each school to determine its own curriculum program, instructional strategies, schedule and professional development plans. Most districts now make these decisions themselves. But designing and implementing a substantive, school-based management system would provide a powerful incentive for improvement.

A decentralized management approach does not necessarily mean schools would determine their own goals, content standards or accountability systems; these could remain responsibilities of the school district. Schools would focus on curriculum, instruction and student achievement, designing strategies or adopting designs that best fit their students and faculty.

In addition to managerial incentives, the education system could provide regulatory incentives, waiving programmatic regulations under certain conditions while retaining civil rights and other equal opportunity requirements. Such waivers could come as reward for a school's success in improving student performance.

2. Expand public school choice.

Public school choice can be seen as a necessary correlate to school decentralization. With choice programs, parents can choose the school their child attends. In general, choice programs allow students to attend schools within their district or in a nearby district as long as space is available. With public school choice, parents and students "vote with their feet" and find schools that meet their needs.

Unlike the present system — in which public schools share similar approaches to curriculum, organization and focus — an expansion of choice programs under a

decentralized management approach could result in schools that differ dramatically from one another. The New American Schools effort, for example, provides eight different models, giving parents and students choices of schools to attend.

Public school choice encourages schools to offer unique visions and programs. Students who choose to attend these schools, as well as the faculty who teach there, can be more motivated as a result.

3. Expand charter school programs.

Charter schools represent the most robust form of school flexibility and autonomy. Charters enable teachers (as well as parents and others) to design schools — including the curriculum, organization and management — to which they are committed.

Though public charter schools are accountable only for results, they often are granted waivers from programmatic, budgetary, personnel and collective bargaining requirements. Theoretically, at their strongest, charter schools can be free from virtually all regulations except those governing civil rights, safety and students with disabilities.

At the same time, though, many current charters fail to specify the results for which these schools are to be held accountable. Accordingly, charter school teachers and administrators may interpret accountability in terms of enrollment. Such measures are not sufficient; charter schools should be held to the same student-performance standards as their more traditional public counterparts. Annual and five-year targets should be written into their charter.

4. Provide "venture capital."

Financial assistance can help schools restructure themselves as well. Such "venture capital" could enable schools to analyze their performance and identify areas for improvement. These funds also could be used to obtain expert assistance, to subsidize site visits to other schools that work and to foster professional development.

Venture capital of this kind should be relatively limited ($25,000–$50,000 per school), offered for a fixed period of time (two to three years) and not used to support permanent staff.[28] Examples include Ohio's Venture Capital Fund and the start-up money New American Schools provided to participating jurisdictions.

B. Incentives for Reallocating Education Resources to More Productive Uses

Most states and school districts are finding money in short supply. The largest reservoir of funds for school restructuring are the dollars already provided to each site for instructional programs, instructional and student support, and administration.

Providing schools their budgets in lump sums can serve as an extremely powerful incentive — one that requires no additional funding and generally improves the use of current dollars. Nearly every country, state and district that has implemented a real school-based funding system has found it highly motivational for school administrators and faculty.[29] Schools that control their budgets almost immediately begin to reallocate at least a small portion of funds to site priorities; schools without lump-sum budgets have great difficulty envisioning alternative ways to use their resources.

The benefits of this approach cannot be overstated. Giving schools control of their budgets increases staff and faculty support for new policies quickly and significantly. Such support — as high as 90% in some cases[30] — can last for several years. And no wonder: most employees would rather decide how to allocate their organization's resources than cede that authority to district or state officials.

Three problems have hampered the implementation of school-based financing in the United States:

- First, many states and districts claim they already are implementing such systems, when in reality they are not.

OHIO BACKS LONG-TERM SCHOOL REFORM

Ohio is using a tried-and-true business practice to encourage experimentation and risk-taking to improve the conditions for learning in its public schools. Based on the business concept of risk capital, the program provides eligible schools $25,000 a year for up to five years to fund improvement efforts focused on a particular dimension of change, such as curriculum development, professional development or assessment. The use of this venture capital is seen as an essential strategy for high-performance teaching and learning.

To qualify for the award, "Venture Schools" must have support for their improvement plan from 80% or more of the building staff, get school board approval to apply for the money and generate community support. After five years, schools are expected to have made significant progress in institutionalizing their commitment to professional development and transforming the school culture. Educators are asked not only to adjust their conventional schooling practices but also to attempt fresh approaches to change in the following areas:

- *Teaching and learning*
- *Assessment*
- *Governance*
- *Organization*
- *Professional development*

By fall 1996, 452 schools (12% of all Ohio schools) were participating in the Venture Capital program, with another 109 beginning that fall. Results indicate that 55.5% of the schools have been able to change behaviors and practices that help and support the education process, i.e., student attendance, discipline, parental support, and teacher and student satisfaction. Additionally, 40.2% report having made changes in daily practices, activities and duties of individuals involved, i.e., teachers working with other adults, students engaged in curriculum decisions and parents involved in decisionmaking. With regard to state proficiency measures, at baseline, test results of first-time test takers in "Venture Schools" look much like other schools in the state.

Adapted from *Venture Capital in Ohio Schools: Building Commitment and Capacity for School Renewal*, Ohio Department of Education, 1995, and "Venture Schools Show Second-Year Gains," *School Improvement Source*, Ohio Department of Education, Fall 1996.

- Second, few states understand that budget decentralization is best structured at the state level, so that districts follow a set of common procedures, if not formulas.

- Third, budget decentralization requires districts and states to specify which functions and resources will be devolved to schools and which ones will not. These decisions should be made explicit and public.

In an analysis of school-based financing in England, Victoria (Australia) and the United States, researchers Allan Odden and Carolyn Busch[32] concluded that at least 75% of a district's operating budget should be directed in a lump sum to school sites. This requires devolving control of instructional programs, instructional and student support, and site administration. (The percentage also could rise over time.)

Under a school-based funding system, the education dollar largely follows the child. Each school would be funded on the basis of the number and characteristics of students it enrolled.

Just as school-based performance awards (discussed above) can motivate teachers, they also can be used to motivate schools. In Kentucky, for example, awards were provided to successful schools, where teachers decided how to use them — for improvements, salary bonuses or some combination. Leaving individual allocations in the hands of teachers, however logical, generated a great deal of controversy.[33]

In implementing such bonus programs, states and districts will have to decide how much money to offer schools and how these funds should be used. Among the options: salary bonuses for all faculty, individual school improvement accounts, schoolwide improvements or additions to the student activity fund, as an incentive for students. Districts or states might allow faculties to apportion awards among these uses.

Though still new, school-based performance awards are gaining popularity — and showing early signs of promise — across the country. States and districts should continue not only to develop such programs but also to evaluate them.

Public recognition represents another potentially powerful incentive. At present, though, academic achievement usually is overshadowed by athletic success. That need not be the case: academic performance could be promoted through science fairs, mental "decathlons" and other team competitions. Improvements in student performance could be celebrated through press coverage and public events. And key lessons could be shared through case studies, faculty workshops and perhaps even television documentaries. In short, the education system should create a variety of activities to celebrate academic achievement. The resulting publicity provides cost-free incentives for students, teachers and schools.

Parents clearly need to become more engaged in their children's learning, especially at the secondary level. What can schools do to help? One way is to explain what constitutes an academically sound set of courses, how much time students should spend on homework and what grades they should earn (e.g., an "A" or "B"). By clarifying expectations — the requirements for high school graduation or college admission, for example — secondary schools can help parents understand performance standards and ensure their children meet them.

At the elementary level, schools should concentrate on what parents can do at home to help their children learn. Outreach programs focus too often on fundraising (through parent-teacher organizations), decisionmaking (through school site councils) or other nonacademic activities. Although these activities may serve other purposes, they produce little effect on student achievement.

INDIANA'S FOUR STAR AWARDS RECOGNIZE TOP SCHOOLS

In Indiana, schools that continue to be high performing are eligible for special recognition. The Indiana Four Star Awards program recognizes schools that consistently perform at a high level. Under Indiana's accountability system, monetary awards go to schools that show improvement in two of four performance indicators [student attendance rates, mathematics proficiency scores, language arts proficiency scores and ISTEP+ (Indiana's statewide testing program)]. Sixty percent of public schools qualify for this reward.

High-performing schools that already have high scores on these four indicators, however, have difficulty showing improvement gains and thus receiving recognition in the form of monetary awards. To recognize these schools, the "Four Star School" status is given to schools that place in the top 25% on the four indicators.

In 1994, 377 schools (21% of all schools) satisfied the criteria for "Four Star Schools" and received this award.

Adapted from *Indiana Four Star Awards*, Indiana Department of Education, and *The Promise and Reality of Rewards for School Improvement*, Richard King and Judith Mathers, University of Northern Colorado.

Instead, elementary schools should encourage parents to read and discuss stories with their children, to engage them in open-ended conversations, to set aside a place for their children to do homework — and to ensure this work is done! Helping parents and students understand content and performance standards is equally important.

To develop and implement outreach programs of this kind, schools should receive small monetary awards. The education system also should identify and publicize the most effective examples of parental involvement.

Schools need incentives to strengthen their extracurricular programs, particularly clubs, intramural sports, after-school tutoring and service activities. As noted earlier, students who engage in these types of programs are more likely to take tougher courses, complete homework assignments, earn good grades and reach higher standards.

Unfortunately, these are also the types of programs most likely to suffer budget cuts. Yet given their relatively low expenses, these programs are among the most cost-effective means of boosting student achievement.

The most direct incentive would be a fund of money for each school to design and administer extracurricular programs. Alternatively, states could set aside a small portion of school budgets for this purpose. Identifying the most effective extracurricular programs — through written reports, district- or state-sponsored awards, media coverage or other forms of public recognition — would provide an additional incentive.

CHAPTER 5

THE STATE ROLE

States can and should play key roles in creating incentives for students, teachers and schools. And while a modest set of incentives would be better than none, there is no reason why states should not consider a comprehensive system. The following discussion includes 15 areas for possible state initiative:

1. States should clarify the mission of public education.

In a standards-based system, most states would need to rewrite their mission statements to read something like this: "The mission of the (name of state) public education system is to produce high levels of student achievement in the core academic subjects of language arts, writing, history/social studies, mathematics and science." Both Cincinnati and Memphis have adopted this type of mission during the past two years, and Arizona recently created one.

2. States should develop clear standards and assessments or require districts to do so.

Curriculum content and performance standards, as well as the tests aligned with them, should focus on what students know and can do. At the high school level, states should consider developing a series of more specific academic course outlines — similar in intent to Advanced Placement courses — and end-of-course tests for those classes. Maryland boasts a sound system of standards and assessments. Colorado, Connecticut, Delaware and Kentucky also have developed clear and rigorous academic standards.

Curriculum content and performance standards, as well as the tests aligned with them, should focus on what students know and can do.

If state standards are developed only at key grade levels — e.g., 4th or 5th, 8th and 10th, 11th or 12th — districts should be required to create grade-to-grade standards as well. Schools also should align curriculum unit to curriculum unit programs so teachers and schools have a clear strategy for preparing students to meet standards at each point.

Connecticut, Kentucky, Maryland and Missouri have developed sound testing programs. To ensure validity and reliability, today's tests include multiple-choice items and short-answer questions, as well as a small number of performance tasks. The Regents

Examinations in New York and the Golden State Exams in California are examples of good end-of-course tests at the high school level.

3. States should design standards-based accountability systems.

Accountability systems should be based on student achievement and feature both rewards and sanctions. Kentucky's school-based performance awards form probably the most robust such program in the country; research suggests they have made a significant contribution to the success of Kentucky's education reforms. Similar programs exist in Maryland and North Carolina. These programs, which provide incentives for both teachers and schools, consume roughly 1% of the education operating budget supported by state and local revenues.

The goal . . . is to make academic performance matter in promotion, graduation and college entrance.

States also should consider school intervention and reconstitution strategies. Kentucky, Maryland, New York State, Chicago and San Francisco have begun to reconstitute schools that were unable to improve student performance. In Maryland, schools that need help are encouraged to select a whole-school design from a national reform network — such as New American Schools — and to make that design the focus of their restructuring efforts. This approach gives schools both a concrete vision and access to a system of professional development and technical assistance.

The Distinguished Educator (DE) program in Kentucky represents another promising intervention strategy. Low-performing schools are designated "in decline" and assigned expert assistance. Although the designation initially was a source of embarrassment, most schools have thrived under the DE program; more than half earned performance bonuses in the subsequent cycle.

4. States should offer students incentives for academic engagement.

The goal here is to make academic performance matter in promotion, graduation and college entrance. States should make promotion from elementary to middle school contingent upon a student's ability to meet 4th-

or 5th-grade standards, and promotion from middle to high school contingent upon meeting 8th-grade standards. In addition, states should create either a set of end-of-course examinations for high school — requiring an overall minimum score in order to graduate — or a comprehensive high school graduation test, specifying a similar "cut" score.

5. States should require a substantial body of academic coursework for high school graduation and for college admission.

College admission course requirements could be higher than those for graduation, but the two should be connected. Student performance on the high school examinations described above eventually could become the key test of college admission, at least for public colleges and universities. States should also hold meetings to determine how best to produce comparable testing information for students from other states — information that reflects not simply general aptitude but also standards-based achievement. Even private universities should make admission contingent on minimal levels of high-school performance.

6. States should encourage employers to consider high school performance.

The rigor of students' courses, the grades they receive and the scores they earn on high school graduation exams should figure into businesses' decisions regarding hiring, apprenticeships, training opportunities and starting salaries. To ease access to student transcripts, states should create a computerized system, perhaps linked to the World Wide Web. A common core of items would facilitate the use of this data across schools and districts. States also may need to amend existing laws or lobby Congress to make such practices legal.

7. States should develop an array of incentives for teachers.

Focusing the mission on core academic subjects and providing specific and realistic content and performance standards would lend clarity and purpose to the education system and motivate teachers to focus on those areas.

8. States should encourage decentralization.

By devolving authority and broadening decisionmaking, districts enable teachers to take a more active role in the management and organization of their schools. England; Victoria, Australia; and several North American cities, including Cincinnati, Edmonton, Memphis, Pittsburgh and Seattle, are moving in this direction. No North American state has created a full-fledged, decentralized system; Kentucky has come the closest.

9. States should encourage schools and districts to set aside 3-5% of their operating budgets for ongoing professional development and continuous improvement.

Missouri, which sets aside 2% of its state education budget for this purpose, is a good example of this policy. Missouri's program has vastly expanded both the size and the scope of professional development across the state — key to the success of its standards-based reforms.

Ohio's Venture Capital Fund and a similar program in Broward County, Florida, provide schools with annual sums of $25,000–$50,000 for two to five years to support initial restructuring. The funds can be used to help the education system continually improve its strategies and results.

10. States should encourage districts to add knowledge- and skill-based elements to the teacher salary schedule.

This policy would introduce an extrinsic incentive to what intrinsically motivates teachers: improving their professional expertise. New laws in California and Colorado encourage districts to create such innovations, while a 1997 Florida law requires districts to provide 10% of teachers' salaries on this basis.

To implement this policy, states could adopt the Praxis or INTASC programs for teacher certification and directly provide (or encourage districts to provide) salary increases to teachers who meet these standards. Alternatively, states might provide funding for teachers to take the NBPTS assessments; those who earn

certification would receive a significant salary increase. North Carolina, for example, not only pays the $2,000 fee for the NBPTS assessment, but also provides a permanent 12% salary increase for qualifying teachers. Georgia covers the $2,000 fee and provides a 5% salary increase. Other states have adopted similar approaches.

States could specify that a proportion of increased state funding be used to subsidize these new pay elements. Many states also allow teachers to use NBPTS certification in place of recertification requirements or to qualify for a teaching license if they have relocated from other states.

Finally, states could work with school board associations, teachers' unions and other education organizations to create teaching standards and a testing system that fills the vacuum between Praxis and INTASC (for beginning teachers) and board certification (for accomplished teachers). Such efforts could draw upon the teaching standards being developed by state teaching boards in California, Connecticut, Illinois, Kentucky and Minnesota. (These standards need to become much more elaborate, identifying explicit levels of performance between novice and accomplished status and by providing assessment tools).

11. States should provide incentives for districts and schools to create parent seminars and to expand after-school intramural, academic club and service activities.

One way to accomplish this goal is to create a youth services program at each school, coordinating social and health services, extracurricular activities, tutoring and even child care for teen mothers.

A nationally renowned New Jersey program represents one of the best examples. At the secondary school level, the New Jersey School-Based Youth Services program provides:

- Mental health and family counseling
- Preventive and some primary health care
- Employment services
- Substance abuse prevention and counseling
- Information and referral
- After-school and evening recreational programming (depending on need)
- In-school child care for pregnant teens
- Family planning
- Parenting education.

The elementary school version of this program provides:

- Mental health and family counseling
- Preventive and some primary health care
- An elementary version of substance abuse prevention and counseling
- Parental outreach
- After-school and evening recreation
- Homework help.

New Jersey's program costs about $300 per elementary or secondary school student.

12. States should develop a framework for districts to provide a lump-sum budget to each school.

Lump sums would be determined largely on a per-pupil basis, weighted for different student needs. These budgets would provide schools with powerful incentives to use current resources more effectively and efficiently. Although no state is implementing this policy, models can be found in Broward County, Florida; Pittsburgh; Seattle; and Edmonton, Alberta, Canada. (Minnesota attempted to create such a policy in 1997, but the plan proved too controversial.)

13. States should expand public school choice and charter school programs.

As an extension of professional decentralization strategies, states may want to allow parents to enroll their children in any public school they choose and help low-income students secure transportation. States also should accommodate larger numbers of charter schools, including those converted from existing schools and those newly created.

In both choice and charter policies, states should let enrollment patterns determine the flow of funds; students should be counted in the school/district attended for all school financing, including general aid, as well as state and federal categorical programs. This strategy eliminates the need for complex revenue transfer systems.[14]

Minnesota's choice and charter programs are good examples. Students can attend any public school in Minnesota as long as seats are available. The state also has substantially increased the number of charter schools allowed, as well as the number of public entities that can grant charters. Most important, in calculating state and local budgets, Minnesota counts the student in the school or district he or she attends. (For the purposes of state aid, charter schools are treated as a district with no local property wealth; charter school students are eligible for all categorical aid programs.)

14. States should increase opportunities to celebrate student achievement.

Increased recognition by political leaders, the business community and the news media, as well as the education system itself, will encourage student achievement. The possibilities range from gubernatorial awards to televised competitions. Academic performance should receive at least as much recognition as athletic endeavors.

Increased recognition by political leaders, the business community and the news media, as well as the education system itself, will encourage student achievement.

15. States should change school finance systems to make incentives and requirements fair to all.

States should provide enough resources for all schools to teach their students to rigorous standards. Odden and Busch suggest a minimum of $4,300 per pupil in FY97 dollars; given differences among states' needs, an adjustable base of $5,000 may be more appropriate. States should supplement this base, they say, by funding additional services for low-income students — at least $1,000 per pupil, as well as federal Title I funds.

To ensure high levels of academic performance, states also should consider providing a preschool program and full-day kindergarten for all low-income children. To finance such programs, each 4- and 5-year-old could be counted as a full, 1.0 student in the state's school finance equalization program.

A comprehensive incentive structure will provide both intrinsic and extrinsic reasons to reach high standards — the ultimate aim of school reform.

The school finance structure New Jersey is developing could serve as a national model. Among other features, the state does the following:

- Provides a high base level of funding to enable most schools to keep class sizes under 20, to offer professional development resources equal to 2% of salaries, and to supply one computer for every five students
- Is beginning to fund full-day kindergarten and a preschool program for all low-income children
- Encourages sites to make whole-school programs the focus of their instructional activities, ensuring a concrete curriculum for teaching students to New Jersey's emerging content and performance standards.

In conclusion, states enjoy many opportunities to create incentives for students, teachers and schools. As this guidebook shows, many of these incentives can work in tandem. A comprehensive incentive structure will provide both intrinsic and extrinsic reasons to reach high standards — the ultimate aim of school reform.

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